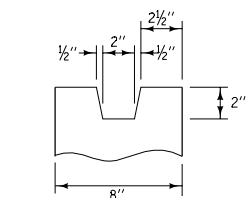


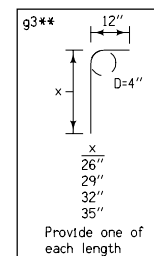
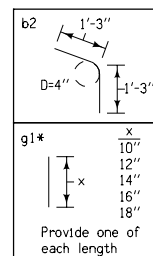
PLAN VIEW  
(RA-42 EXTENSION AND RA-41 INTAKE)



KEYED CONSTRUCTION  
JOINT DETAIL

Placing sequence: 1. Base; 2. Walls and Extension; 3. Top; 4. Insert

REINFORCING BAR LIST						
BAR	SIZE	LOCATION	SHAPE	NO.	LENGTH	WEIGHT
b2	4	Intake Wall		3	2'-6"	5.0
f1	4	Bottom		3	4'-9"	9.5
f2	4	Bottom		4	1'-7"	4.2
g1	4	Wall		5	Varies*	3.9
g2	4	Wall		1	4'-8"	3.1
g3	4	Top		4	Varies**	6.8
g4	4	Top		3	6'-4"	12.7
Total						45 lbs.



#### GENERAL NOTES:

This detail illustrates the construction and installation of an extension unit for use with a Standard Road Plan RA-41 Intake.

All reinforcing bars shall be ASTM A 615, Grade 60.

Extension unit may be used on either or both sides of intakes. Details are similar when installation is on side opposite to that indicated.

Dimensions shown hereon are for the construction of a 6 inch Standard Curb as a part of pavement. Modifications may be made to conform to other curb shapes and intake designs when necessary, subject to the approval of the Engineer.


A concrete fillet shall be placed in the bottom of the intake approximately as indicated. Special shaping of this fillet is required to provide a smooth channel through the intake. Top surface of the fillet shall slope at a rate of approximately 12:1 (Horizontal: Vertical) toward the channel.

Joints in pavement adjacent to intake and extension unit shall be as shown on Standard Road Plans RH-50, RH-51 and RH-52. Joint locations shall be as indicated hereon except where specifically modified by other plan drawings or by the Engineer.

Price bid for "Intake Extension Unit, RH-42" shall include:

- All necessary excavation and backfill.
- Furnishing all materials and constructing extension as detailed.

① The Location Station is where the centerline of intake meets the Back of Curb line.



**Iowa Department of Transportation**  
Highway Division

**STANDARD ROAD PLAN RA-42(1)**

REVISION: Require Concrete Fillet.	REVISION NO.
	1
<i>William J. Allen</i>	REVISION DATE
APPROVED BY DESIGN METHODS ENGINEER	04-15-03

**INTAKE EXTENSION UNIT**  
**(FOR STANDARD RA-41 INTAKE)**  
**(SHEET 1 OF 3)**